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10/540,573	06/24/2005	Naoki Kobayashi	016778-0498	6434

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EXAMINER	
HUANG, WEN WU	

ART UNIT	PAPER NUMBER
2618	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/540,573	KOBAYASHI ET AL.	
	Examiner	Art Unit	
	WEN W. HUANG	2618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *07 January 2009*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *18-32* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *18-32* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claims 1-17 are cancelled.

Claims 18-32 are pending.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

1. Claims 19 and 21 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claims 19 and 21 recite that wherein said dielectric member is directly connected to a front side of said antenna in which no other element is connected to said dielectric member. However, the Examiner submits fig. 2 of the instant application shows the lower dielectric member 17 is connected to casing 12 of the mobile phone.

Therefore, the Examiner submits that "no other element is connected to said dielectric member" was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 18, 20, 22, 23 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bickert et al. (US. 5,907,307; hereinafter "Bickert") in view of Olsson et al. (US. 7,132,987 B1; hereinafter "Olsson").

Regarding **claim 18**, Bickert teaches a portable telephone (see Bickert, fig. 3) comprising:

a casing (see Bickert, fig. 3, casing 30),

an antenna mounted on an end of said casing (see Bickert, fig. 3, antenna 10; col. 13, lines 38-42); and

a dielectric member having a relative dielectric constant of more than one and little loss (see Bickert, fig. 2, radiation redistributing object 12; col. 11, line 60 - col. 12, line 4);

wherein said dielectric member is directly connected to a side of said antenna (see Bickert, col. 12, lines 43-49; object 12 can be place in contact with the antenna), said side of said antenna being positioned farther away from a body of a user than all other sides of said antenna when the user is operating the portable telephone (see Bickert, col. 12, lines 49-58).

Bickert is silent to teaching that comprising a dielectric member is directly connected to no other side of said antenna. However, the claimed limitation is well known in the art as evidenced by Olsson.

In the same field of endeavor, Olsson teaches a portable telephone (see Olsson, fig. 3, mobile telephone 1) comprising a dielectric member (see Olsson, fig. 3 and 5, support elements 26 and 27, col. 4, lines 1-4) is directly connected to no other side of said antenna (see Olsson, fig. 3 and 5, antenna trace 21 and 22; col. 4, lines 17-23).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine the teaching of Bickert and Olsson in order to improve antenna performance while in talking/operating position (see Olsson, col. 1, lines 64-67).

Regarding **claim 20**, the combination of Bickert and Olsson teaches the portable telephone according to claim 18, wherein said casing includes an upper casing on which a speaker and a display screen are disposed (see Bickert, fig. 3, speaker 28 and display 42);

wherein said antenna is mounted on an upper end of said upper casing (see Bickert, fig. 3, antenna 10); wherein said dielectric member is directly connected to a back side of said antenna (see Bickert, col. 12, lines 43-49; dielectric object 12 can be place in contact with the antenna), said back side of said antenna being positioned farther away from a head as the body of the user when the user is holding said upper casing adjacently the head in order to operate the portable telephone (see Bickert, fig.

2, radiation redistributing object 12; col. 11, line 60 - col. 12, line 4 and col. 12, lines 49-58).

Regarding **claim 22**, the combination of Bickert and Olsson teaches the portable telephone according to claim 18, wherein said side of said antenna is entirely connected (see Bickert, col. 12, lines 43-49; dielectric object 12 can be place in contact with the antenna) to and entirely covered by said dielectric member (see Bicker, fig. 8(d), col. 16, line 49).

Regarding **claim 23**, the combination of Bickert and Olsson teaches the portable telephone according to claim 18, wherein said antenna includes a joint provided at one end of said antenna that is coupled to said casing (see Bickert, fig. 3, insert 32);

wherein said joint operates as a feeding section for feeding electricity supplied by said portable telephone to said antenna, and corresponds to a feeding section that feeds power to the antenna from said portable telephone (see Bickert, col. 13, lines 37-42 and 62-67).

Regarding **claim 27**, the combination of Bickert and Olsson teaches the portable telephone according to claim 18, wherein the dielectric member has a curved surface on a side opposite to the antenna (see Bickert, fig. 2, dielectric 12, col. 11, lines 60-65, "C"-shaped).

3. Claims 28, 31 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bickert and Olsson as applied to claim 18 above, and further in view of Shoji et al. (US. 7,031,762 B2; hereinafter "Shoji")

Regarding **claim 28**, the combination of Bickert and Olsson teaches the portable telephone according to claim 18.

The combination of Bickert and Olsson is silent to teaching that wherein the antenna is a built-in antenna built in the upper casing. However, the claimed limitation is well known in the art as evidenced by Shoji.

In the same field of endeavor, Shoji teaches a portable telephone wherein the antenna is a built-in antenna built in the upper casing (see Shoji, fig. 9, component 50).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine the teaching of Bickert and Olsson with the teaching of Shoji in order to alleviate degradation of antenna gain (see Shoji, col. 1, lines 44-46).

Regarding **claim 31**, the combination of Bickert and Olsson teaches the portable telephone according to claim 18.

The combination of Bickert and Olsson is silent to teaching that wherein the antenna is a monopole antenna. However, the claimed limitation is well known in the art as evidenced by Shoji.

In the same field of endeavor, Shoji teaches a portable telephone wherein the antenna is a monopole antenna (see Shoji, col. 2, line12).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine the teaching of Bickert and Olsson with the teaching of Shoji in order to alleviate degradation of antenna gain (see Shoji, col. 1, lines 44-46).

Regarding **claim 32**, the combination of Bickert and Olsson teaches the portable telephone according to claim 18.

The combination of Bickert and Olsson is silent to teaching that wherein the antenna is a meander antenna. However, the claimed limitation is well known in the art as evidenced by Shoji.

In the same field of endeavor, Shoji teaches a portable telephone wherein the antenna is a meander antenna (see Shoji, col. 2, line 13).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine the teaching of Bickert and Olsson with the teaching of Shoji in order to alleviate degradation of antenna gain (see Shoji, col. 1, lines 44-46).

4. Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bickert and Olsson as applied to claim 18 above, and further in view of Filipovic (US. 6,590,544 B1).

Regarding **claim 24**, the combination of Bickert and Olsson teaches the portable telephone according to claim 18.

The combination of Bickert and Olsson is silent to teaching that wherein the dielectric member is a dielectric member in shape of hemisphere. However, the claimed limitation is well known in the art as evidenced by Filipovic.

In the same field of endeavor, Filipovic teaches an antenna wherein the dielectric member is a dielectric member in shape of hemisphere (see Filipovic, col. 2, lines 39-41).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine the teaching of Bickert and Olsson with the teaching of Filipovic in order to improve the directivity of the antenna (see Filipovic, col. 2, lines 22-23; Bickert, col. 12, lines 3-4).

5. Claims 25, 26 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bickert and Olsson as applied to claim 18 above, and further in view of Wong (US. 6,615,026 B1).

Regarding **claim 25**, the combination of Bickert and Olsson teaches the portable telephone according to claim 18.

The combination of Bickert and Olsson is silent to teaching that wherein the dielectric member is a dielectric member in shape of hemicylinder. However, the claimed limitation is well known in the art as evidenced by Wong.

In the same field of endeavor, Wong teaches a portable telephone wherein the dielectric member is a dielectric member in shape of hemicylinder (see Wong, fig. 2, component 18).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine the teaching of Bickert and Olsson with the teaching of Wong in order to direct harmful radio electromagnetic wave away from the user's head (see Wong, col. 2, lines 13-14; Bickert, col. 12, lines 3-4).

Regarding **claim 26**, the combination of Bickert and Olsson teaches the portable telephone according to claim 18.

The combination of Bickert and Olsson is silent to teaching that wherein the dielectric member is a dielectric member in shape of rectangular. However, the claimed limitation is well known in the art as evidenced by Wong.

In the same field of endeavor, Wong teaches a portable telephone wherein the dielectric member is a dielectric member in shape of rectangular (see Wong, fig. 4, component 18).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine the teaching of Bickert and Olsson with the

teaching of Wong in order to direct harmful radio electromagnetic wave away from the user's head (see Wong, col. 2, lines 13-14; Bickert, col. 12, lines 3-4).

Regarding **claim 29**, the combination of Bickert and Olsson teaches the portable telephone according to claim 18.

The combination of Bickert and Olsson is silent to teaching that wherein the antenna is a dipole antenna. However, the claimed limitation is well known in the art as evidenced by Wong.

In the same field of endeavor, Wong teaches a portable telephone wherein the antenna is a dipole antenna (see Wong, col. 2, lines 49-50).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine the teaching of Bickert and Olsson with the teaching of Wong in order to direct harmful radio electromagnetic wave away from the user's head (see Wong, col. 2, lines 13-14).

6. Claim 30 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bickert and Olsson as applied to claim 18 above, and further in view of Harano (US PUB NO. 2002/0142794 A1).

Regarding **claim 30**, the combination of Bickert and Olsson teaches the portable telephone according to claim 18.

The combination of Bickert and Olsson is silent to teaching that wherein the antenna is an inverted-L-shaped antenna. However, the claimed limitation is well known in the art as evidenced by Harano.

In the same field of endeavor, Harano teaches a portable telephone wherein the antenna is an inverted-L-shaped antenna (see Harano, fig. 5, component 11).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine the teaching of Bickert and Olsson with the teaching of Harano in order direct harmful radio electromagnetic wave away from the user's head (see Harano, abstract; Bickert, col. 12, lines 3-4).

7. Claims 19 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bickert and Olsson as applied to claim 18 above, and further in view of Fehrm (US Pub No. 2003/0232628 A1) and Wong.

Regarding **claim 19**, the combination of Bickert and Olsson teaches the portable telephone according to claim 18, wherein said dielectric member is directly connected to said antenna in which no other element is connected to said dielectric member (see Olsson, fig. 5, dielectric member 26 and 27).

The combination of Bickert and Olsson is silent to teaching that wherein said casing includes a lower casing on which a keyboard is disposed;

wherein said antenna is mounted on an lower end of said lower casing; wherein said dielectric member is directly connected to a front side of said antenna, said front

side of said antenna being positioned farther away from a palm as the body of the user when the user is holding said lower casing within the palm in order to operate the portable telephone. However, the claimed limitation is well known in the art as evidenced by Fehrm and Wong.

In the same field of endeavor, Fehrm teaches a portable telephone wherein said casing includes a lower casing on which a keyboard is disposed (see Fehrm, fig. 1, lower casing 2);

wherein said antenna is mounted on an lower end of said lower casing (see Fehrm, antenna 11).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine the teaching of Bickert and Olsson with the teaching of Fehrm in order to achieve good SAR value (see Fehrm, para. [0025]).

The combination of Bickert, Olsson and Fehrm is silent to teaching that wherein said dielectric member is directly connected to a front side of said antenna, said front side of said antenna being positioned farther away from a palm as the body of the user when the user is holding said lower casing within the palm in order to operate the portable telephone. However, the claimed limitation is well known in the art as evidenced by Wong.

In the same field of endeavor, Wong teaches a portable telephone wherein said dielectric member is directly connected (see Wong, fig. 1, dielectric 18) to a front side of said antenna (see Wong, fig. 1, antenna 12), said front side of said antenna being positioned farther away from a palm as the body of the user when the user is holding

said lower casing within the palm in order to operate the portable telephone (see Wong, fig. 1 and 4).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine the teaching of Bickert, Olsson and Fehrm with the teaching of Wong in order to maximize the reflection of energy away from the user's head (see Wong, col. 2, lines 13-15).

Regarding **claim 21**, the combination of Bickert and Olsson teaches the portable telephone according to claim 18, wherein said casing includes an upper casing on which a speaker and a display screen are disposed (see Bickert, fig. 3, speaker 28 and display 42);

wherein said dielectric member includes an upper dielectric member (see Bickert, dielectric object 12); and

wherein said antenna is mounted on an upper end of said upper casing (see Bickert, fig. 3, antenna 10); wherein said dielectric member is directly connected to a back side of said antenna (see Bickert, col. 12, lines 43-49; dielectric object 12 can be place in contact with the antenna), said back side of said antenna being positioned farther away from a head as the body of the user when the user is holding said upper casing adjacently the head in order to operate the portable telephone (see Bickert, fig. 2, radiation redistributing object 12; col. 11, line 60 - col. 12, line 4 and col. 12, lines 49-58), wherein said dielectric member is directly connected to said antenna in which no

other element is connected to said dielectric member (see Olsson, fig. 5, dielectric member 26 and 27).

The combination of Bickert and Olsson is silent to teaching that

wherein said casing includes a lower casing on which a keyboard is disposed;

wherein said antenna includes a lower antenna mounted on an lower end of said lower casing and an upper antenna mounted on an upper end of said upper casing;

wherein said dielectric member includes a lower dielectric member;

wherein said lower dielectric member is directly connected to a front side of said antenna, said front side of said antenna being positioned farther away from a palm as the body of the user when the user is holding said lower casing within the palm in order to operate the portable telephone. However, the claimed limitation is well known in the art as evidenced by Fehrm and Wong.

In the same field of endeavor, Fehrm teaches a portable telephone wherein said casing includes a lower casing on which a keyboard is disposed (see Fehrm, fig. 1, lower casing 2);

wherein said antenna includes a lower antenna mounted on an lower end of said lower casing and an upper antenna mounted on an upper end of said upper casing (see Fehrm, antenna 11).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine the teaching of Bickert and Olsson with the teaching of Fehrm in order to achieve good SAR value (see Fehrm, para. [0025]).

The combination of Bickert, Olsson and Fehrm is silent to teaching that wherein said dielectric member includes a lower dielectric member;

wherein said dielectric member is directly connected to a front side of said antenna, said front side of said antenna being positioned farther away from a palm as the body of the user when the user is holding said lower casing within the palm in order to operate the portable telephone. However, the claimed limitation is well known in the art as evidenced by Wong.

In the same field of endeavor, Wong teaches a portable telephone wherein said dielectric member includes a lower dielectric member (see Wong, fig. 1, dielectric 18);

wherein said dielectric member is directly connected (see Wong, fig. 1, dielectric 18) to a front side of said antenna (see Wong, fig. 1, antenna 12), said front side of said antenna being positioned farther away from a palm as the body of the user when the user is holding said lower casing within the palm in order to operate the portable telephone (see Wong, fig. 1 and 4).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine the teaching of Bickert, Olsson and Fehrm with the teaching of Wong in order to maximize the reflection of energy away from the user's head (see Wong, col. 2, lines 13-15).

Response to Arguments

Applicant's arguments with respect to claims 18-32 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to WEN W. HUANG whose telephone number is (571)272-7852. The examiner can normally be reached on 10am - 6pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew D. Anderson can be reached on (571) 272-4177. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/W. W. H./
Examiner, Art Unit 2618

/Matthew D. Anderson/
Supervisory Patent Examiner, Art Unit 2618